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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,309	09/16/2003	Ryo Fukuda	242278US-620-39-2-S	1787
22850	7590	08/23/2005	DIV	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER LE, TOAN K	
			ART UNIT	PAPER NUMBER
			2824	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/662,309

Applicant(s)

FUKUDA, RYO

Examiner

Toan Le

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-53 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 40-53 is/are allowed.
- 6) ☒ Claim(s) 21-24, 26-31, 33-35 and 38 is/are rejected.
- 7) ☒ Claim(s) 25, 32, 36, 37 and 39 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/993,603.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/11/05, 9/16/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: East search history.

DETAILED ACTION

1. Applicant is requested to update the status of application 09/993,603 (now US patent No. 6,639,850) on page 2 of the Preliminary Amendment filed on 9/16/2003.
2. Please note this is not a divisional application of parent application serial No. 09/993,603. It should be a continuation of application serial No. 09/993,603.
3. The Preliminary Amendments filed on 9/16/2003 and 10/21/2003 are acknowledged.
4. Claims 21-53 are presented for examination.
5. Claims 1-20 are cancelled.

Information Disclosure Statement

6. This office acknowledge receipt of the following items from the Applicant:

Information Disclosure Statement (IDS) filed on September 16, 2003.

Information Disclosure Statement (IDS) filed on April 11, 2005.
7. Information disclosed and list on PTO 1449 was considered.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 21-24, 26-31, 33-35 and 38 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 6,639,850. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claims 21-24, 26-31, 33-35 and 38 are anticipated by claims 1-6 of patent '850, since the first scan output terminal being arranged in an end portion and the second scan input terminal being arranged in the same end portion as said first scan output terminal in claims 1-6 of patent '850 is species of "the first scan output terminal being placed at an end portion and the second scan input terminal being placed at the end portion at which the first scan output terminal is placed" recited in claims 21-24, 26-31, 33-35 and 38.

Allowable Subject Matter

10. Claims 40-53 are allowable over the art of record.

11. Claims 25, 32, 36-37 and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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12. The following is an examiner's statement of reasons for allowance: there is no suggestion or teaching in the art of record disclosing an integrated circuit having a data line being connected adjacent first and second registers of the plurality of first and second registers, data is input to one of the adjacent first and second registers from the outside of the circuits, and the data is output from one of the adjacent first and second registers to the outside of the circuits as recited in claims 25, 32, 39 and 49, nor is there suggestion or teaching the operation circuit having a second scan input terminal connected to the first scan input terminal and a second scan output terminal connected to the first scan output terminal, in combination with the remaining claimed limitation recited in the independent claim 40, nor is there suggestion or teaching a second integrated circuit having an arrangement which is a mirror inversion of the first integrated circuit, the second integrated circuit being placed on a side of the operation circuit away from a side at which the first integrated circuit is formed, in combination with the remaining claimed limitation recited in the independent claim 45.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Matsuzawa et al. (US. 6,343,365) discloses a integrated circuit having flip-flops that are serially connected, and a method of testing a board using a scan path.

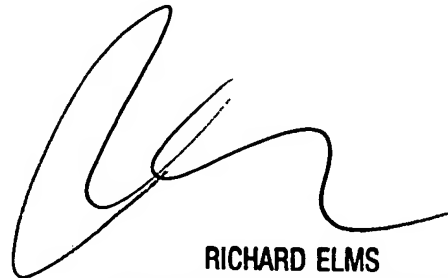
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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan Le whose telephone number is (571) 272-1872. The examiner can normally be reached on M-F (8.00AM - 5.30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Elms can be reached on (571) 272-1869. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TL
August 20, 2004

A handwritten signature in black ink, appearing to be 'Richard Elms', written in a cursive style.

RICHARD ELMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800